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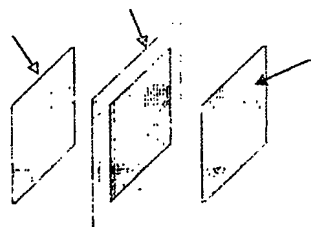
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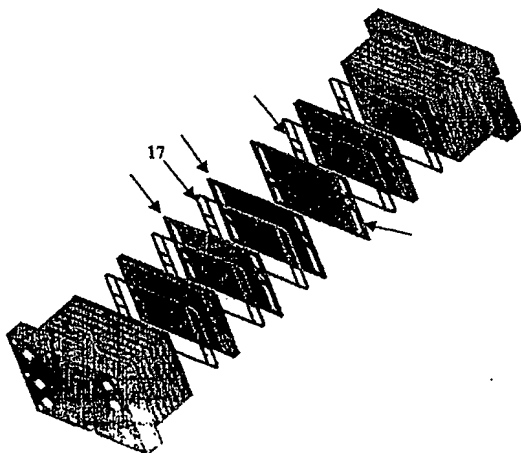
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(21) International Application Number: **PCT/CA2004/000436** [CA/CA]; 34 Sarah Street, Napanee, Ontario K7R 3X4  
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(54) Title: **INTEGRATED ELECTRICALLY CONDUCTIVE ELECTROCHEMICAL CELL COMPONENT**



(57) Abstract: An electrically conductive electrochemical cell component is disclosed. The cell component includes a first coolant plate (21) and an adjacent plate, wherein the adjacent plate is a second coolant plate or a bipolar plate (5). The first coolant plate has at least one mating region, preferably a rib (25), for mating with a complementary region, preferably a groove (30), on the adjacent plate. The first coolant plate and the adjacent plate are each made of a polymer and conductive filler blend. The first coolant plate is joined to the adjacent plate by a seal (40) formed by the polymer at the mating region and the complementary region. The seal is created using vibrational or resistive welding processes.



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**A. CLASSIFICATION OF SUBJECT MATTER**  
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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/000640 A1 (MERCURI ROBERT ANGELO) 2 January 2003 (2003-01-02) paragraphs '0036!, '0067!, '0077! - '0079!	1-26
X	WO 02/091506 A (THE MORGAN CRUCIBLE COMPANY PLC; TURPIN, MARK, CHRISTOPHER; BOFF, JAME) 14 November 2002 (2002-11-14) cited in the application page 4, line 4 - line 9 page 4, line 22 - page 5, line 30 page 7, line 25 - page 8, line 13	1-5, 8-17, 20-26
A	WO 01/80339 A (NEDSTACK HOLDING B.V; MIDDELMAN, ERIK; VAN DER ZIJDEN, ARTHUR) 25 October 2001 (2001-10-25) page 4, paragraph 2 page 6, paragraph 2	1, 13
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	EP 1 189 297 A (MITSUI TAKEDA CHEMICALS, INC) 20 March 2002 (2002-03-20) paragraphs '0006! - '0013!, '0035! - '0041! -----	3,15
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Information on patent family members

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